



BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 4793
Order No. R-4389

APPLICATION OF TENNECO OIL COMPANY
FOR A PRESSURE MAINTENANCE PROJECT
AND UNORTHODOX LOCATIONS, MCKINLEY
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 9, 1972,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 7th day of September, 1972, the Commission,
a quorum being present, having considered the testimony, the
record, and the recommendations of the Examiner, and being fully
advised in the premises,

FINDS:

- (1) That due public notice having been given as required
by law, the Commission has jurisdiction of this cause and the
subject matter thereof.
- (2) That the applicant, Tenneco Oil Company, seeks
authority to institute a pressure maintenance project in the
South Hospah-Lower Sand Pool by the simultaneous injection of
water and gas into the Lower Hospah formation through two wells
located in Section 12, Township 17 North, Range 9 West, McKinley
County, New Mexico.
- (3) That the applicant further seeks the designation of
the project area and the promulgation of special rules and regula-
tions governing said project.
- (4) That initially the project area should comprise only
the following-described area:

MCKINLEY COUNTY, NEW MEXICO
TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM
Section 12: NW/4 and W/2 NE/4

- (5) That a pressure maintenance project, designated the
Tenneco Lower Hospah Pressure Maintenance Project, comprising
the above described area is in the interest of conservation and
should result in greater ultimate recovery of oil, thereby pre-
venting waste.

(6) That an administrative procedure should be established whereby said project area may be expanded for good cause shown and whereby additional wells in the project area may be converted to water injection.

(7) That special rules and regulations for the operation of the Tenneco Lower Hospah Pressure Maintenance Project should be promulgated and, for operational convenience, such rules should provide certain flexibility in authorizing the production of the project allowable from any well or wells in the project area in any proportion, provided that no well in the project area which directly or diagonally offsets a well on another lease producing from the same common source of supply should be allowed to produce in excess of top unit allowable for the South Hospah-Lower Sand Pool until such time as the well has experienced a substantial response to water injection. When such a response has occurred, the well should be permitted to produce up to two times top unit allowable for the South Hospah-Lower Sand Pool. Production of such well at a higher rate should be authorized only after notice and hearing.

IT IS THEREFORE ORDERED:

(1) That the applicant, Tenneco Oil Company, is hereby authorized to institute a pressure maintenance project in the South Hospah-Lower Sand Pool, McKinley County, New Mexico, to be designated the Tenneco Lower Hospah Pressure Maintenance Project, by the simultaneous injection of water and gas into the open-hole interval opposite the Lower Hospah formation through the following-described two wells in Section 12, Township 17 North, Range 9 West, NMPM, McKinley County, New Mexico:

~~Hospah Well No. 35~~ - 1,340 feet from the North line and
1,710 feet from the West line;

Hospah Well No. 36 - 900 feet from the North line and
2,630 feet from the East line.

(2) That the aforesaid injection wells shall be equipped with 2 7/8-inch tubing set in packers, said packers being located within 100 feet of the casing shoe. Further, that the casing tubing annulus shall be filled with an inert fluid and the annulus equipped with a pressure gauge to facilitate detection of leakage in the tubing or packer.

(3) That Special Rules and Regulations governing the operation of the Tenneco Lower Hospah Pressure Maintenance Project, McKinley County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
TENNECO LOWER HOSPAH PRESSURE MAINTENANCE PROJECT

RULE 1. The project area of the Tenneco Lower Hospah Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise the area described as follows:

McKINLEY COUNTY, NEW MEXICO
TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM
Section 12: NW/4 and W/2 NE/4

RULE 2. The allowables for the Project shall be the sum of the allowables of the several wells within the project area, including those wells which are shut-in, curtailed, or used as injection wells. Allowables for all wells shall be determined in a manner hereinafter prescribed.

RULE 3. Allowables for injection wells may be transferred to producing wells within the project area, as may the allowables for producing wells which, in the interest of more efficient operation of the Project, are shut-in or curtailed because of high gas-oil ratio or are shut-in for any of the following reasons: pressure regulation, control of pattern or sweep efficiencies, or to observe changes in pressures or changes in characteristics of reservoir liquids or progress of sweep.

RULE 4. The allowable assigned to any well which is shut-in or which is curtailed in accordance with the provisions of Rule 3 which allowable is to be transferred to any well or wells in the project area for production, shall in no event be greater than its ability to produce during the test prescribed by Rule 6, below, or greater than the current top unit allowable for the pool during the month of transfer, whichever is less.

RULE 5. The allowable assigned to any injection well on a 40-acre proration unit shall be top unit allowable for the South Hospah-Lower Sand Pool.

RULE 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 I (a) and the limiting gas-oil ratio (2,000 to 1) for the pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire.

RULE 7. The basic allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or to top unit allowable for the pool, whichever is less. Wells capable of producing more than top unit allowable may also

receive transfer allowable, provided however, that no producing well in the project area which directly or diagonally offsets a well on another lease producing from the same common source of supply shall receive an allowable or produce in excess of two times top unit allowable for the pool. Each producing well shall be subject to the limiting gas-oil ratio (2,000 to 1) for the pool.

RULE 8. Every four months the project operator shall submit to the Commission a Pressure Maintenance Project Operator's Report, on a form prescribed by the Commission, outlining thereon the data required, and requesting allowables for each of the several wells in the Project as well as the total project allowable based upon the pool's depth bracket allowable and the market demand percentage in effect. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form C-120 for the Project.

RULE 9. The Commission shall, upon review of the report and after any adjustments deemed necessary, calculate the allowable for each well in the Project for the next two succeeding months in accordance with these rules. The sum of the allowables so calculated shall be assigned to the Project and may be produced from the wells in the Project in any proportion except that no well in the Project which directly or diagonally offsets a well on another lease producing from the same common source of supply shall produce in excess of two times top unit allowable for the pool.

RULE 10. The conversion of producing wells to injection, the drilling of additional wells for injection, and expansion of the project area shall be accomplished only after approval of the same by the Secretary-Director of the Commission. To obtain such approval, the project operator shall file proper application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional injection wells shall include the following:

(1) A plat showing the location of proposed injection wells, all wells within the project area, and offset operators, locating wells which offset the project area.

(2) A schematic drawing of the proposed injection wells which fully describes the casing, tubing, perforated interval, and depth showing that the injection of gas or water will be confined to the Lower-Hospah formation.

(3) A letter stating that all offset operators to the proposed injection wells have been furnished a complete copy of the application and the date of notification.

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The Secretary-Director may approve the proposed injection wells if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

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